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Nota di contenuto	<p>Intro -- Preface to the Second Edition -- Contents -- 1 Introduction -- 1.1 Truck Engines and Passenger Car Diesel Engines in Comparison -- 2 Diesel Fuel and Air -- 2.1 Air -- 2.2 The Air-Fuel Equivalence Ratio -- 3 The Mechanics of the Engine -- 3.1 The Crank Assembly -- 3.1.1 The Piston -- 3.1.2 The Motion of the Piston -- 3.1.3 Blow-by Losses and Crankcase Ventilation -- 3.2 The Valve Train and the Gear Train -- 3.3 The Engine Brake -- 3.3.1 The Exhaust Flap Valve (Exhaust Brake) -- 3.3.2 The Decompression Brake -- 3.3.2.1 Decompression Through the Exhaust Valves -- 3.3.2.2 The Constant Throttle Valve -- 3.4 Lubrication -- 4 Integrating the Engine in the Vehicle -- 4.1 The Cooling System -- 4.2 The Engine Needs Fresh Air: The Air Intake -- 5 The Fuel System and Fuel Injection -- 6 The Exhaust System -- 6.1 Exhaust Gas Turbocharger -- 6.1.1 Turbocompounding -- 6.2 Exhaust Gas Treatment -- 6.2.1 Emissions -- 6.2.1.1 Formation of Exhaust Gas Constituents -- 6.2.1.2 Nitrogen Oxides (NOx) -- 6.2.1.3 Particulate Matter (PM) -- 6.2.2 Reduction of Nitrogen Oxides -- 6.2.2.1 Exhaust Gas Recirculation, EGR -- 6.2.2.2 Selective Catalytic Reduction, SCR -- 6.2.3 Reduction of Particulate Matter in Exhaust Gas -- 6.2.3.1 The Diesel Particulate Filter -- 6.2.4 Reduction of Hydrocarbons and Carbon Monoxide -- 6.2.5 Combined Systems -- 7 Thermodynamics -- 7.1</p>

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